

**ENGINEERING AND PUBLIC WORKS DEPARTMENT
REZONING & DEVELOPMENT COMMENTS**

DATE: February 28, 2022

CIVIC ADDRESS: 32805, 32809, 32811, 32819, 32825, 32835 View Avenue,
32822 32829 1st Avenue, and 7288 Wardrop Street

CURRENT ZONE: CTR

PROPOSED ZONE: MU2

Disclaimer

The following comments are listed as deficiencies for the sole purpose of identifying required works and services to enable the assembled properties to Rezone to a Mixed-Use Commercial/Residential zone and Develop a mixed-use apartment building. The following works and services for this rezoning and development proposal are in accordance with the standards contained within the City of Mission's (CoM) current Development and Subdivision Control Bylaw (DSCB) 5650-2017 as amended, Water Bylaw 2196-1990 as amended (Water Bylaw), Sewer Bylaw 5033-2009 as amended (Sewer Bylaw), Solid Waste Management Bylaw 5526-2015 as amended (SWMB), and the Fire Sprinkler Bylaw 5679-2017 (Sprinkler Bylaw). Additional requirements as specified by other stakeholder authorities are considered to be above and beyond the scope of these comments.

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The City has received a Development Permit (DP) Application Package complete with Architectural Drawings and Traffic Impact Assessment, but no conceptual servicing plan. No preliminary servicing capacity analysis has been considered as a result.

DOMESTIC WATER REQUIREMENTS:

Municipal water service is available on Wardrop Street and 1st Avenue.

Connection to the municipal system is required.

CoM records indicate that only two of the subject properties have water service connections (32822 1st Avenue & 7288 Wardrop Street). CoM records indicate these services are not metered. Please note that the Sprinkler Bylaw states in Item 4 (b) that an approved Fire Sprinkler System shall be installed in all new buildings, additions, and renovations that exceed 50% of the current floor area.

The existing 19mmØ water services to shall be decommissioned and replaced with an adequately sized water service to satisfy the sprinkler requirements complete with new meter and radio read system. This in turn will require the existing 19mmØ water services to be capped at the watermain.

The supply and installation of a new water service connection and capping of the old services will be provided by the CoM in accordance with the Water Bylaw at the Developer's cost.

Adjacent to the subject properties, the existing watermain are 300mmØ and are likely sufficient to meet the fire flow requirements for new construction. The City does not guarantee fire-flow requirements. The developer shall prove out the limitations of the existing system by whatever means deemed appropriate and shall ensure the development is adequately serviced at the developer's sole expense. This includes Hydraulic Modeling of the fire flow demands for the proposed development and resolving any identified system deficiencies as a condition of Development.

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Engineered design is required. See DSCB, Schedule C, Section 3 as amended.

STORM SEWER REQUIREMENTS:

Municipal storm service (piped) is available on Wardrop Street and at the intersection of View Avenue and Maple Street.

Connection to the municipal system is required.

The CoM does not guarantee depth at property line. The Developer shall prove out the limitations of the existing system by whatever means deemed appropriate and shall ensure the Development is adequately serviced at the Developer's sole expense. In accordance with the DSCB, Schedule C, Section 4, 4.10.9.5 "The *Drainage System* and all service connections shall be at a depth to permit gravity flow from the existing or proposed *building(s)* to the main." CoM records suggest that the lowest level of the proposed underground parking structure is below the depth of the adjacent storm system on Wardrop Street and the intersection at View & Maple. As no conceptual servicing plan was included with the application it is unknown how the Developer proposes to service the lowest level with a gravity storm service.

The Developer is required to design and install storm water Best Management Practices (BMPs) for the site that reduce the site's 10-year post-development runoff rate to its 10-year pre-development runoff rate. Per the DSCB Schedule C, Section 5.3.2.3, this shall be achieved by way of on-site detention facilities such as ponds, tanks, etc. One storm service connection will be required for the site and shall be sized accordingly.

Designs shall be accompanied by a statement from a fully qualified professional engineer, which clearly identifies the specific opportunities and constraints for implementing best management practices for the development, demonstrates that groundwater recharge and/or other appropriate best management practices are sustainable, and have been maximized for the particular site and provides examples of similar installations which demonstrate the sustainability, ability to construct, and ease of maintenance of the works to be constructed.

In particular, when implementing the CoM groundwater recharge guidelines, the Developer shall be responsible to have a qualified professional conduct a hydrological investigation to estimate infiltration rates and soil permeability and determine the location of the water table and its seasonal variations of the site. This information is to be included in any engineering drawing submittals, as it is critical to the design of Best Management Practices (BMPs).

Proposed measures shall be subject to acceptance by the Municipal Engineer and/or the Senior Building Inspector.

Engineered design is required. See DSCB, Schedule C, Sections 4 and 5 as amended.

SANITARY SEWER REQUIREMENTS:

Municipal sanitary service is available on Wardrop Street.

Connection to the municipal system is required.

CoM records indicate that only one of the subject properties has an existing service connection (7288 Wardrop Street). The 100mmØ asbestos concrete pipe shall not be reused and shall be capped at the main by the CoM at the Developer's cost. An adequately sized sanitary connection for the proposed Development shall be required. New services shall be installed by the CoM in accordance with the Sewer Bylaw at the Developer's cost.

The City does not guarantee depth at property line. The developer shall prove out the limitations of the existing system by whatever means deemed appropriate and shall ensure the Development

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is adequately serviced at the Developer's sole expense. This may include paying the City to model the Sanitary Sewer System to investigate the impact of the Development on the system capacity under the existing and future scenarios and resolving any downstream deficiencies resulting from the future scenario as a condition of Development.

Engineered design is required. See DSCB, Schedule C, Sections 6 and 7 as amended.

ROAD WORK REQUIREMENTS:

Municipal road access can be achieved via Wardrop Street, 1st Avenue, Maple Street or View Avenue.

A Traffic Impact Assessment (TIA) for the proposed development may be required by the Ministry of Transportation and Infrastructure (MOTI) as a condition of Rezoning and/or Development.

A TIA was prepared by CTS dated July 2021. This TIA was submitted with the application package. It is unknown if this report will be acceptable to MOTI.

The following are the Recommendations as written in the noted report:

Based on this transportation impact assessment study, CTS recommends the following:

- 1. The developer work with the District of Mission to ensure any improvements to the fronting sidewalks on 1st Avenue and Wardrop Street align with the District of Mission Official Community Plan and Transportation Master Plan.*
- 2. That the MoTI continue to monitor the queueing for the left turn bays on Park Street at Lougheed Highway, and when necessary, optimize the signal timing or extensions be made.*
- 3. That the MoTI to consider restricting the southbound left turn at the intersection of Wardrop Street at Lougheed Highway and redirect the traffic to use the intersection of Park Street at Lougheed Highway to make the southbound left turns.*

All upgrades and/or deficiencies identified by the final TIA accepted by MOTI and the CoM shall be completed/corrected at the developer's sole expense and will be a condition of Development.

The Engineering & Public Works Department understands that the current DP drawing package has been developed without having the benefit of knowing what the final offsite parameters will be as specified by the acceptance of both CoM and MOTI.

At the time of writing these comments the following is hereby noted by City staff:

- The DSCB Introduction, Section 9.7 – Highway Dedication, states the following: *“The maximum required highway dedications for various classifications of highways in a Subdivision/Development shall be as specified in Schedule A hereto. The Municipality shall advise the Owner of the classification of each highway in a proposed Subdivision/Development and the required highway dedication.”*

As such, the Developer may be required to dedicate additional Highway Dedication adjacent to the proposed Development to provide a total highway dedication width sufficient to construct an appropriate road standard, complete with corner truncations, intersection improvements, road drainage, sidewalk, underground hydro, gas, telephone, and street lighting. Survey and design will be required to determine whether or not there is a need for additional highway dedication. Should it be determined that additional dedication is required, granting of such dedication will be a condition of Development.

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The submitted DP package shows a desire to purchase the municipal lane bisecting the development site from Wardrop Street to Maple Street. This will require the Developer to negotiate a purchase and for the City to pass a road closure bylaw in accordance with Policy STR.34 – Road Closure and Sale.

Engineered design is required. See the DSCB, Schedule C, Section 8 – Roadways.

STREET LIGHTING:

In accordance with the DSCB, Schedule B-1, the design and installation of municipal street lighting adjacent to the site and/or upgrades to the existing system as necessary will be required as a condition of Development.

Street lighting design shall compliment the Roadway Design and be in general conformance with the DSCB with a preference for LED lighting.

Engineered design is required. See the DSCB, Schedule C, Section 9 – Street Lighting, as amended.

BOULEVARD TREE PLANTING:

In accordance with the DSCB, Schedule B-1, the design and installation of boulevard trees adjacent to the site is not required for the MU2 zone. However, should the plan include trees within the municipal boulevard the street boulevard tree planting design shall compliment the Roadway Design and be in general conformance with DSCB and all proposed plant material will require approval from the CoM Manager of Parks & Facilities.

See the DSCB, Schedule C, Section 11 – Boulevard Tree Planting, and 12 – Specifications and Standards for Landscaping, as amended.

ENGINEERING STANDARDS AND CONSTRUCTION DRAWING SPECIFICATIONS:

Engineered design shall be prepared and submitted in general conformance with the DSCB.

See the DSCB, Schedule C, Section 2 – Engineering Standards, 13 – Construction Drawing Submissions, and Form F-5 – Commitment by Owner and Consulting Engineer, as amended.

POWER, GAS & TELECOMMUNICATIONS:

In accordance with the DSCB, Schedule B-1, service connection to the property line shall be underground. Any new Distribution System adjacent to the Development shall be underground.

The Developer's engineer and/or third-party utility company shall certify to the Municipal Engineer that the Power and Telecommunications has been designed and constructed/secured in accordance with good engineering practice prior to approval of the Development.

See the DSCB INTRODUCTION, Section 9.5 Power and Telecommunications Distribution, as amended.

LOT GRADING:

Lot grading in accordance with Schedule E of the DSCB is applicable.

LATECOMER CHARGES:

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Pursuant to the Local Government Act Section 507(2) the local government will not require that the owner of the land that is to be subdivided or developed provide excess or extended services and as such Latecomer Charges shall not apply.

ENVIRONMENTAL REQUIREMENTS:

The site is located within the City's Natural Environment Development Permit Area, please follow [Official Community Plan](#) (OCP) guidelines (see OCP Section 9.7). Please have a QEP conduct a preliminary bio-inventory of terrestrial site features, including tree inventory, habitat assessment (including species at risk) and a noxious weed assessment, specifically for the four knotweed species and giant hogweed, as per Section 9.16 of the [DSCB](#).

No trees are to be removed during bird nesting season (March 1 to August 31), unless the appropriate assessment, reports, and mitigation actions are undertaken by a Qualified Environmental Professional (QEP) to ensure compliance with the federal [Migratory Birds Convention Act](#) and the provincial [Wildlife Act](#), as required meet the legislation and ensure best management practices are followed.

Additionally, a QEP shall review the ditches along the east and south perimeters of the site for the applicability of the Riparian Areas Protection Regulation (RAPR) and the Water Sustainability Act (WSA).

IMPORTANT: no trees, other vegetation, waterbody or soil is to be removed or disturbed before the City has issued the Natural Environment Development Permit.

WASTE MANAGEMENT

Please refer to both applicable bylaws for complete details on waste management requirements. The summary below is provided for convenience only.

As per the [SWMB](#), by default, the City's contractor provides **On-site Collection** to multi-family complexes in 360-litre wheeled carts for compost and recyclables and 80-litre wheeled carts for container glass only. The owners makes their own arrangements for the collection of garbage. 95 units will require fourteen 360-litre carts for recyclables, eight 360-litre carts for compost, and twelve 80-litre container glass carts. The storage requirements for garbage will depend on the collection frequency negotiated with a private contractor.

On-site Collection facilities must be fully enclosed buildings, structures or compounds that are adequate to prevent wildlife access but designed and located to provide easy access and egress for collection vehicles, and preferably head-on access to overhead bins. **Please refer to Schedule L of the [DSCB](#) for details on enclosure size, locations and access requirements.**



Kyle D'Appolonia, Environmental Coordinator

RECOMMENDATION:

From an engineering point of view, the application may proceed to adoption once the Rezoning/Development requirements have been clarified and met per the DSCB, Introduction, Item 10 and/or 11.

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